

### Abstract

The present invention relates to an apparatus for image projecting and/or material processing having a deflection device (3) for variably deflecting a light beam (2) emanating from a light source (1) onto a projection area or a processing area (7), a modulation device (4) for modulating an intensity of the light beam (2) and a control unit (5) which is connected to the modulation device (4) and by means of which the modulation device (4) can be triggered to modulate the intensity of the light beam (2) according to input data.

Disposed between the deflection device (3) and the projection area or the processing area (7) is a shading element (6), by means of which the light beam (2) is faded out within a multiplicity of time intervals, into which the total duration of the projection or the processing is subdivided, for one or a multiplicity of time segments, and the control unit (5) contains a control program which regulates the modulation device (4) during the time segments in such a manner that an at least approximately constant mean intensity of the light beam (2) is yielded in the time intervals.

The present apparatus and the corresponding method permit attaining a temporally constant temperature of the deflection element of the deflection device during processing and/or projection.